

UNION CARBIDE CORP LINDE DIV -- CARBON DIOXIDE,11042 -- 4730-01-365-6916

===== Product Identification =====

Product ID:CARBON DIOXIDE,11042

MSDS Date:07/01/1986

FSC:4730

NIIN:01-365-6916

Kit Part:Y

MSDS Number: CFCXM

=== Responsible Party ===

Company Name:UNION CARBIDE CORP LINDE DIV

Address:39 OLD RIDGEBURY RD

City:DANBURY

State:CT

ZIP:06817-0001

Country:US

Info Phone Num:203-744-3487

Emergency

Phone Num:800-UCC-HELP (800-822-4357)

CAGE:36346

=== Contractor Identification ===

Company Name:DUTCH VALLEY SUPPLY CO

Address:970 PROGRESS CTR AVE

Box:City:LAWRENCEVILLE

State:GA

ZIP:30043

Country:US

Phone:(404-513-0612)

CAGE:31068

Company Name:UNION CARBIDE CORP LINDE DIV

Address:39 OLD RIDGEBURY RD

Box:City:DANBURY

State:CT

ZIP:06817-0001

Country:US

Phone:800-822-4357; 304-744-3487

CAGE:36346

===== Composition/Information on Ingredients =====

Ingred Name:CARBON DIOXIDE

C

AS:124-38-9
RTECS #:FF6400000
Fraction by Wt: 100%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:5000 PPM
ACGIH TLV:5000PPM/30000STEL;96

=====
===== Hazards Identification =====

LD50 LC50 Mixture:TLV IS 5000 PPM.
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:TARGET ORGANS:LUNGS, CNS, EYES, SKIN.
ACUTE- CONTACT WITH LIQUID CAN CAUSE EYE AND SKIN FROSTBITE. GAS
MAY CAUSE EYE IRRITATION. ASPHYXIAN. INHALATION MAY CAUSE
RESPIRATORY ACIDOSIS. HIGH CONCENTRATIONS MAY CAUSE RAPID
CIRCULATORY INSUFFICIENCY LEADING TO DEATH. INGESTION IS NOT LIKELY
(GAS). CHRONIC- UNKNOWN.
Explanation of Carcinogenicity:NONE
Effects of Overexposure:FROSTBITE, EYE IRRITATION, HEADACHE,
DROWSINESS, DIZZINESS, STINGING OF THE EYES, NOSE AND THROAT,
EXCITATION, RAPID BREATHING AND HEART RATE, EXCESS SALIVATION,
SHORTNESS OF BREATH, MUSCULAR WEAKNESS , RINGING IN
THE EAR,
UNCONSCIOUSNESS, COMA, NAUSEA, VOMITING, WATERY EYES (FORMATION OF
WEAK CARBONIC ACID)
Medical Cond Aggravated by Exposure:PERSONNEL WITH PRE-EXISTING CHRONIC
RESPIRATORY DISEASES OR HEART DISORDERS SHOULD REFRAIN FROM
BREATHING EXCESSIVE CARBON DIOXIDE.

=====
===== First Aid Measures =====

First Aid:INHALATION:REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NEEDED.
EYES:IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES. SEE AN
OPHTHALMOLOGIST, URGENTLY. SKIN:FLUSH WITH WARM WATER (NOT TO
EXCEED 106 F). PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES
OF OVEREXPOSURE TO CO2. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH
SELF CONTAINED BREATHING APPARATUS. ORAL:NOT LIKELY. LIQUID CAUSES
FROSTBITE.

=====
===== Fire Fighting Measures =====

Flash Point:NONE
Lower Limits:NOT RELEVANT
Upper Limits:NOT RELEVANT
Extinguishing Media:WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL
FO

R SURROUNDING FIRE. USE WATER SPRAY TO COOL FIRE EXPOSED CYLINDERS.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND NIOSH-APPROVED SELF CONTAINED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:CARBON DIOXIDE CANNOT CATCH FIRE BUT CYLINDERS MAY RUPTURE.

===== Accidental Release Measures =====

Spill Release Procedures:LIQUID CARBON DIOXIDE WILL FORM SOLID CO₂ (DRY ICE) WHEN RELEASED TO ATMOSPHERIC PRESSURE. THE AREA SHOULD BE

VENTILATED. CLEAN UP PERSONNEL SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE MASK AND HEAVY PROTECTIVE CLOTHING.

Neutralizing Agent:NOT RELEVANT

===== Handling and Storage =====

Handling and Storage Precautions:STORE IN A COOL, WELL-VENTILATED PLACE. DO NOT STORE ABOVE 120F. KEEP OUT OF REACH OF CHILDREN.

Other Precautions:KEEP AWAY FROM SOURCES OF HEAT. CAUTION! CAN CAUSE RAPID SUFFOCATION DUE TO OXYGEN DEFICIENCY. USE WITH ADEQUATE

VENTILATION. CO₂ IS HEAVIER THAN AIR AND TENDS TO ACCUMULATE NEAR THE FLOOR IN CLOSED SPACES. READ ALL LABELS INSTRUCTIONS.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NONE REQUIRED UNDER NORMAL USE. HOWEVER, AIR-SUPPLIED RESPIRATORS ARE REQUIRED WHILE WORKING IN CONFINED SPACES WITH THIS PRODUCT. THE RESPIRATORY PROTECTION USE MUST CONFORM WITH OSHA RULES AS SPECIFIED IN 29 CFR 1910.134.

Ventilation:SUFFICIENT TO PREVENT ACCUMULATION ABOVE TLV. LOCAL EXHAUST LOCATED NEAR THE FLOOR.

Protective Gloves:INSULATED AND COLD RESISTANT NEOPRENE

Eye Protection:SAFETY GOGGLES RECOMMENDED

Other Protective Equipment:EYE WASH STATION, SAFETY SHOWER, INDUSTRIAL-TYPE WORK CLOTHING, SAFETY SHOES AND APRON AS REQUIRED.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES.

Supplemental Safety and Health

KEY1:G3. THIS KIT CONSISTS OF CARBON DIOXIDE (PNI A) AND COUPLING HOSE

(PNI B), PER TECHNICAL SUPPORT AND DDSP-XP.

===== Physical/Chemical Properties =====

HCC:G3
NRC/State Lic Num:NOT RELEVANT
Boiling Pt:B.P. Text:-109F SUBLI
Vapor Pres:43671 @70F
Vapor Density:1.52
Spec Gravity:GAS
pH:ACIDIC
Viscosity:NOT RELEVANT
Evaporation Rate & Reference:NOT RELEVANT (GAS)
Solubility in Water:SLIGHT
Appearance and Odor:COLORLESS, ODORLESS GAS
Percent Volatiles by Volume:100

===== Stability and Reactivity Data =====

=

Stability Indicator/Materials to Avoid:YES
ALKALI METALS, ALKALINE EARTH METALS, CHROMIUM
Stability Condition to Avoid:OVERHEATING CYLINDERS (125F/52C)
Hazardous Decomposition Products:OXYGEN AND HIGHLY TOXIC CARBON
MONOXIDE

===== Disposal Considerations =====

Waste Disposal Methods:SLOWLY RELEASE INTO ATMOSPHERE OUTDOORS.
DISPOSAL SHOULD BE IN COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL
REGULATIONS. DEFECTIVE CYLINDERS SHOULD BE TAGGED TO INDICA
TE A
DEFECT.

Disclaimer (provided with this information by the compiling agencies):
This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their

particular situation.